

CLAIM

What is claimed is:

1. An image processor comprising:

an image input unit for receiving two-dimensional images;

5 a motion calculator for selecting a motion detecting area for each of two images received by the image input unit, and for calculating a motion vector between the two images based on projective data that is acquired by computing in a predetermined direction pixel values in the motion detecting areas ;

10 a displacement calculator for calculating image correlativity between the two images in the direction that the motion vector calculated by the motion calculator designates, and for calculating based on the calculated values the amount of pixel displacement between the two images; and

an image output unit for cutting away an area from a camera-shake
15 compensation area designated in the second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and for outputting the area as an image for the image output area of the second frame.

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2. An image processor comprising: an image input unit for receiving two-dimensional images;

a motion calculator for selecting a plurality of motion detecting areas for each of two images received by the image input unit, and for calculating
25 motion vectors between the two images, with regard to each of the plurality

of motion detecting areas, based on projective data that is acquired by computing in a predetermined direction pixel values in the motion detecting areas;

a conversion/compensation unit for calculating pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and for applying pivoting and zooming conversion to the second image, based on the pivoting and zooming components, and for acquiring a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors;

a displacement calculator for calculating the image correlativity between the two images, in a direction that the compensated motion vector designates, and for calculating based on the calculated correlativity values the amount of pixel displacement between the two images ; and

an image output unit for cutting away an area from a camera-shake compensation area designated in the second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and for outputting the area as an image for the image output area of the second frame.

3. An image processing method comprising:

an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a motion detecting area for each of two images received by the image input unit, and of calculating a motion vector between the two images based on projective data that is acquired by

computing in a predetermined direction pixel values in the motion detecting areas;

5 a displacement calculating step of calculating the image correlativity between the two images, in a direction that the motion vector calculated by the motion calculator designates, and of calculating the amount of pixel displacement between the two images, based on the calculated correlativity values; and an image outputting step of cutting away an area from a camera-shake compensation area designated in the second frame, the area being produced by displacing an image output area in the camera-shake
10 compensation area, by the pixel-displacement amount calculated by the displacement calculator, and for outputting the area as an image for the image output area of the second frame.

4. An image processing method comprising:

15 an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a plurality of motion detecting areas for each of two images received by the image input unit, and of calculating motion vectors between the two images, with regard to each of the plurality of motion detecting areas, based on projective data that is
20 acquired by computing in a predetermined direction pixel values in the motion detecting areas;

a first conversion/compensation step of calculating pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and of applying pivoting and zooming conversion
25 to the second image based on the pivoting and zooming components;

a second conversion/compensation step of calculating a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors;

5 a displacement calculating step of calculating the image correlativity between the two images, in a direction that the compensated motion vector designates, and for calculating the amount of pixel displacement between the two images, based on the calculated values; and

10 an image outputting step of cutting away an area from a camera-shake compensation area designated in the second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and for outputting the area as an image for the image output area of the second frame.

15 5. A recording medium in which a program for implementing the steps recited in claim 3 is stored.

6. A recording medium in which a program for implementing the steps recited in claim 4 is stored.

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